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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Kenneth A. Parulski, et al

DIGITAL CAMERA PROVIDING IMAGE PROCESSING FOR AN ATTACHABLE PRINTER

Serial No. 09/800,158

Filed 06 March 2001

Group Art Unit: 2612

Examiner: Brian J. Jelinek

I hereby certify that this correspondence is being deposited today with the United States Postal Service as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Gina Schmitt

June 30, 2005
Date

Commissioner for Patents
P.O. Box 1450
Alexandria, VA. 22313-1450

Sir:

DECLARATION OF PRIOR INVENTION IN THE UNITED STATES TO OVERCOME CITED PATENT (37 C.F.R. 1.131)

PURPOSE OF THE DECLARATION

This declaration is to establish completion of the invention in this application in the United States, at a date prior to January 30, 1997, that is the effective date of the prior art Ogawa et al. patent that was cited by the Examiner.

The persons making this declaration are the inventors.

FACTS AND DOCUMENTARY EVIDENCE

To establish the date of completion of the invention of this application, the following attached documents are submitted as evidence:

1. A Search Request and Memorandum for File prepared by Kodak attorney Milton S. Sales and dated **August 9, 1996**, requesting a State of the Art search, and showing a search date of September 16, 1996.

2. A follow-up Invention Disclosure form dated on **August 13, 1996** by inventor Jeffrey A. Small, witnessed on August 14, 1996, showing conception of the invention set forth in at least claims 1 and 14 of the application.
3. A memo from Jeffrey A. Small to attorney Milton Sales dated **August 14, 1996**, which accompanied the Invention Disclosure of Item 2 and showing a receipt date by the Patent Department of **August 16, 1996**.
4. An Internal Memo dated **September 17, 1996** from attorney Milton Sales to inventor Jeffrey A. Small forwarding the results of the search.
5. A memo from Jeffrey A. Small to attorney Milton Sales dated **November 18, 1996**, including the inventor's analysis of the search results included in the Internal Memo of August 17, 1996.
6. A two-page set of drawings dated **March 17,1997** by inventor Jeffrey A. Small intended to assist in the preparation of the parent application which was filed on **April 4, 1997**.

From these documents, it can be seen that the invention of Claims 1 and 14 in this application conceived at least by the date of August 9, 1996, which is a date earlier than the effective date of the reference.

The documents also establish the diligence of the applicants, from a time just prior to the date of the reference, up to the filing of the parent application of this application.

TIME OF PRESENTATION OF THE DECLARATION

This declaration is submitted after final rejection. A showing under 37 CFR 1.116(b) is submitted herewith.

DECLARATION

As the person signing below, I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United states Code, and

that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

SIGNATURES

Full name of first inventor: Kenneth A. Parulski

Inventor's signature: Kenneth A. Parulski

Date: June 30, 2005 Country of Citizenship: United States

Residence: Monroe County

Post Office Address: 225 Intrepid Circle

Rochester, NY 14617

Full name of second inventor: Jeffrey A. Small

Inventor's signature: Jeffrey A. Small

Date: June 28, 2005 Country of Citizenship: United States

Residence: Monroe County

Post Office Address: 12 Emerald Point

Rochester, NY 14624-3702

EASTMAN KODAK COMPANY
Search Request and Memorandum for File

ALL INFORMATION ON THIS FORM MUST BE PRINTED OR TYPED

Requester: Prepare Form in Duplicate; Forward Original and 1 Copy to:
Patent Information Section, Joann Scotty, 12th Fl, B-83, KP-02201 (X-22486)

Milton S. Sales	Patent Legal Staff / 02201	C02329 - 2
Requester Name	Requester Department & Mail Code	Search Number (PLS USE ONLY)
FMSP	ltsf00	(716) 253-0127
Docket or Supervisor Code	Requester PROFS I.D.	Requester **Complete** Telephone Number

☐ Update from previous search: # _____ (Previous Search No. or Docket No.)

normal 9/13
Date Needed
Normal Turnaround time is one month from date of receipt of confirmation

TITLE: Digital Camera and Printer System

CENTRAL FEATURE: A digital still camera can be connected directly to a small personal printer without a computer interface because a micro-computer within the camera body is used to convert the captured image into color separation bit maps to be stored in the camera and down loaded directly to the printer.

Client is: Bill Fowlkes

KAD PATENT DEPT.
SEP 17 1996
EASTMAN KODAK CO

Type of Search:
- ☐ Novelty/Patentability
- ☒ Infringement
  - ☒ Infringement Request discussed w/ Attorney
- ☐ Validity
- ☒ State of Art
- ☐ Assignee/Inventor
  - ☐ Complex
  - ☐ Simple
- ☐ Collection
- ☐ Literature

Recommendations:
- ☐ On-Line Search Only
- ☐ Derwent Search
- ☐ U.S.
- ☐ Foreign
- ☐ If outside searcher used: _____

**ART KNOWN TO REQUESTER: 4,714,962; 4,751,583; 4,827,347 (EK) - provide copies with search report

L7 L3 ↓ attached

For In-house Searchers Only
Inside Manual Search Conducted: ☐ Yes ☐ No
Classes searched:
Databases searched:
THIS MUST BE COMPLETED BEFORE RETURNING TO JOANN SCOTTY

Contact Attorney: Milton S Sales	Searched By:	Received On:
Date: August 9, 1996	Date: 9-16-96	8/13
Attorney Phone No. 253-0127	COST $ 8.43	

Revised 9-Aug-96

Cos. Code: _____

EASTMAN KODAK COMPANY
CONFIDENTIAL INFORMATION
CONTROLLED DISTRIBUTION

Request No. _____

Access. No. _____

Docket No. 74892

KODAK INVENTION DISCLOSURE

To: Patent Department, Attention: Milt Sales (Pat. Dept. Attorney) _____ (Location)

Subject: Patentability Evaluation for (Title): Smart Electronic Camera with a Slave Printer

Earliest Date of Invention: March 25 1996

Documentation: Notebook No./Page No.: ~~~ / ~~~ Date: ~~~ Author(s): ~~~

Other (e.g. Technical Reports, Memos, etc.): Screen Dump of my PC Date: _____ Author(s): Jeffrey Small

Commercialization/Outside Disclosure: Currently Planned? [X] YES [ ] NO

Product, Process, Project, or Program: A6 PRINTER Date: Mid '97 (Check here [✓] if Clearance Study is also requested)

Disclosure: On attached typewritten pages, provide all the information requested for the sections listed below. Identify each section with the heading indicated. Provide all the information requested to the best of your knowledge as this will save time for you and the patent attorney. Each page should be signed and dated by each contributor and two disclosure reviewers. Consult your Patent Attorney, if necessary, for further details on required information.

Sections

I. **Background:** Briefly discuss the need for the invention. Indicate the current state of the art (what is being done/used now by Kodak and others). Identify pertinent literature (patents or other published articles) and other public disclosures of which you are aware. Identify the problems of the closest prior technology which the invention solves.

II. **Summary of Invention:** Summarize the invention in general terms. State the novel feature(s) of the invention which solve(s) the problem(s) identified in the background section. Set forth the basic idea of the invention.

III. **Detailed Description:** Describe the specifics of the invention. Use drawings, flow charts, block diagrams, schematics, tables, formulas, test results, etc. (free from Kodak codes and jargon) as appropriate. Include a broad description, preferred embodiments, and specific examples. You must disclose the best mode contemplated for practicing the invention. Preferably, describe the invention at a level where one with a technical background but no detailed knowledge of the particular field could understand the description. Enough information should be provided to enable a person skilled in the technology to practice the invention without undue experimentation.

IV. **Advantages:** State the advantage(s) over the prior technology which the invention provides. These advantages should be supported by the description in the previous section of the results achieved by the invention.

Contributor(s)/Inventor(s):

	FULL Name (Print or type)	Organization	Phone	Signature	Date
1.	Jeffrey Small	D-749	89404	Jeffrey A. Small	8-13-96
2.					
3.					
4.					

Read and Understood By: (1) _____ (Signature) _____ (Date) (2) _____ (Signature) 8/14/96 (Date)
(Two disclosure reviewers)

Approved By: _____ (Name of Lab Head, Technical Director, etc.) LAB HEAD COGC (Title/Organization) WILLIAM FOWLER (Signature) 8/14/96 (Date)

Category: TECHNICAL DIRECTOR, ANSWER THE FOLLOWING QUESTIONS:

I. Is there a reasonable prospect of commercial use of the invention by Kodak? [X] Yes [ ] No

II. If not, is there a reasonable prospect of commercial use by others to compete with Kodak? [X] Yes [ ] No

(Initials _____, Date 8/14/96)

Jeffrey Small

August 13, 1996

Smart Electronic Camera with a Slave Printer

Background:

In designing systems which contain both a digital camera and a digital printer, the images captured by the camera must be processed before they can be printed. This processing is typically done in either the printer, or else in a computer which is connected to both the camera and the printer. In order to process an image that has been captured by an electronic camera for printing, significant computing and memory resources are required. Memory resources must already exist in the camera in order for the camera to do a frame grab from its electronic image sensor. Computing resources must also already exist in the camera in order to perform color filter array interpolation, compression, and file management. Further, many cameras have a display in order to review images that have been captured, or for use as an electronic viewfinder. Currently, printers for use with electronic cameras either require an external computer, use a video interface and hence need video processing circuitry, or contain computing and memory resources which also exist in the cameras.

Description:

Rather than duplicate computing and/or memory resources that are in the camera by also putting them into a printer, a system consisting of an electronic camera and a printer may be built; wherein the memory and computing resources exist only in the camera. Because such resources are already required by the camera in order to perform the camera functions, the cost of the camera is not increased. Because the resources are then no longer required in the printer, the overall system cost is reduced.

Firmware may be written for the camera which could support many different printers. This would require parameters to be uploaded from the printer to the camera to provide information such as print size (in linear dimensions and in pixels), colorimetry, sensitometry, and compensation information that is needed to reduce printer process artifacts such as thermal smear.

Advantages:

- No external computer is required to print from the camera.
- System cost is reduced because memory and computing resources are not duplicated.
- System power requirements are reduced.

Inventor: Jeffrey A. Small Date: Aug. 13, 1996

Read & Understood by: [illegible] Date: 8/13/96

Read & Understood by: [illegible] Date: 8/14/96

August 14, 1996

To: Milt Sales
From: Jeffrey Small x89404
Subject: Attached IR

Bill Fowlkes has put some urgency on this IR. I will be on vacation until Wed., 8/21, so I wanted to get this to you ASAP. I will do the searching when I return.

Thanks,

Jeff

Kodak **INTERNAL MEMO**

TO: Jeff Small		FLOOR 1	BLDG 65	PLANT RL
FROM: Milt Sales		DATE 9-17-96	
SUBJECT: Digital Camera & Printer System		BINDER #	SHEET #

Because of the urgency mentioned in your note of 8/14/96, I went ahead & ordered a novelty search on this disclosure. The search results are enclosed, including searcher's report, cited patents, and your original disclosure. I have not retained a copy of any of this material.

Pls review the disclosures. If you believe that a worthwhile patent can still be obtained, pls schedule a Patentability Mtg. with me (my secretary's # is 3005). At the mtg, be prepared to discuss the most pertenent prior art, and how your idea differs. Have a copy of those patents that you can leave w/ me.

If an appl'n is to be written, it will probably be done by outside counsel. Therefore, having a fairly detailed writing (plus disc on Microsoft Word 6.0 or lower) would be helpful. Sketches of one or more implimentations of your idea are essential.

Milt

18-Nov-96

TO: Milt Sales
From: Jeffrey Small
Subject: Search results for my IR: "Smart Electronic Camera with a Slave Printer"

The following documents the search results contain what may be pertinent information relative to my invention report. My idea is to perform "printer process-specific" precompensation in the camera rather than in the printer. My idea's primary advantage is that the printer may be simplified because resources that are adequate to do the printer process-specific processing already exist in many cameras. By doing the processing in the camera, such resources need not be provided in the printer.

Here are specific documents of interest from the search:

5138459: This describes processing images in the camera using different, user-selectable compression algorithms.

4937676: This describes "signal control and processing means disposed respectively within said camera and printer housings," but makes no mention of how these means are partitioned between the camera and printer. It also requires that memory be moved from the camera to the printer.

5563655: (Kodak patent) This describes saving various image processing algorithms in the same memory that the processed images will be stored in. No mention is made of a printer.

4827347: (Kodak patent) Claim 3 of this describes a camera with an electronic display [for previewing images] that "transmits" images to a printer. No mention is made of where any processing of these images is to be done.

4161749: Claim 1 has the printer taking "color signals" from the "imaging apparatus", where these colors are "different color components of the optical image" (not of the print image as in my idea). Claim 11 requires the processing means to convert from a "primary color space" to a "secondary color space" to be in the printer (rather than in the camera, as in my idea).

4942477: An "image pickup means" provides a "serial signal directly to a printing means", but this signal requires embedded line feeds (my idea does not).

4903132: (Re: 34654) An electronic camera includes means to convert color video output from the camera's memory into a printer format. I am unsure how this impacts my invention.

We can discuss my invention and the above patents when we meet.

Jeffrey Small

Jeff Small
x89404